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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/430,767	10/29/1999	DAVID E. HECKERMAN	1018.037US1	7721

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AMIN. TUROCY & CALVIN, LLP  
24TH FLOOR, NATIONAL CITY CENTER  
1900 EAST NINTH STREET  
CLEVELAND, OH 44114

EXAMINER
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STARKS, WILBERT L

ART UNIT	PAPER NUMBER
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2129

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/430,767

Applicant(s)

HECKERMAN ET AL.

Examiner

Wilbert L. Starks, Jr.

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36,38 and 41-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36,38 and 41-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 U.S.C. §101*

1. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 1-36, 38, and 41-76 is directed to non-statutory subject matter.

2. None of them is limited to practical applications. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 U.S.C. §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "item" references are just such abstract ideas.

3. Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete

Art Unit: 2129

agreement with those decisions. *Warmerdam* is consistent with *State Street*'s holding that:

Today we hold that *the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price*, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result' -- *a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.* (emphasis added) *State Street Bank* at 1601.

4. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se* statutory. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."

5. The court was being very specific.

6. Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." (i.e. the trading activity is the further practical use of the real world

Art Unit: 2129

monetary data beyond the transformation in the computer – i.e., “post-processing activity”).)

7. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

8. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

...[T]he dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating ‘abstract ideas’ or ‘natural phenomena’ ... As the Supreme Court has made clear, ‘[a]n idea of itself is not patentable, ... taking several abstract ideas and manipulating them together adds nothing to the basic equation.’ *In re Warmerdam* 31 USPQ2d at 1759 (emphasis added).

9. Since the Federal Circuit held in *Warmerdam* that this is the “dispositive issue” when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is “useful, concrete, and tangible” in similar cases. Accordingly, the Examiner finds that Applicant manipulated a set of abstract “items” to solve purely algorithmic problems in the abstract (i.e., what *kind* of “item” is used? Heart rhythm data? Algebraic equations? Boolean logic problems? Fuzzy logic algorithms? Probabilistic word problems? Philosophical ideas? Even vague expressions, about which even reasonable persons could differ as to their meaning? Combinations thereof?) Clearly, a claim for manipulation of “items” is provably even more abstract (and thereby less limited in practical application) than pure “mathematical algorithms” which the Supreme Court has held are per se nonstatutory – in fact, it *includes* the expression of nonstatutory mathematical algorithms.

10. Since the claims are not limited to exclude such abstractions, the broadest reasonable interpretation of the claim limitations includes such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. §101 doctrine.

Art Unit: 2129

11. Since *Warmerdam* is within the *Alappat-State Street Bank* line of cases, it takes the same view of “useful, concrete, and tangible” the Federal Circuit applied in *State Street Bank*. Therefore, under *State Street Bank*, this could not be a “useful, concrete and tangible result”. There is only manipulation of abstract ideas.

12. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T Corp. v. Excel Communications, Inc.* decision. The Court reminded us that:

Finally, the decision in *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. \*\*\* The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that ‘taking several abstract ideas and manipulating them together adds nothing to the basic equation’; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court’s conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

13. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the “useful, concrete, and tangible” nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.

14. The fact that the invention is merely the manipulation of *abstract ideas* is clear. The data referred to by Applicant’s word “item” is simply an abstract construct that does not provide limitations in the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under *AT&T*, *State Street* and *Warmerdam*, is straightforward and

Art Unit: 2129

clear. The claims take several abstract ideas (i.e., "items" in the abstract) and manipulate them together adding nothing to the basic equation. Claims 1-36, 38, and 41-76 are, thereby, rejected under 35 U.S.C. §101.

### ***Claim Rejections - 35 U.S.C. §112***

The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-36, 38, and 41-76 are rejected under 35 U.S.C. §112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a §101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed *how* to practice the *undisclosed* practical application. This is how the MPEP puts it:

("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35 U.S.C. §101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. §101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. §112."; In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with §112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**") See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-36, 38, and 41-76 are rejected on this basis.



Art Unit: 2129

***Claim Rejections - 35 U.S.C. §102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2 are rejected under 35 U.S.C. §102(e) as being anticipated by Ballard (U.S. Patent Number 6,182,050 B1; dated 30 JAN 2001; class 705; subclass 014.)

Specifically:

**Claim 1**

Claim 1's "allocating each of a plurality of items to at least one of a plurality of clusters, based on a predetermined criterion accounting for at least a quota for each item;" is anticipated by Ballard, col. 9, lines 39-45, where it recites:

For advertisement distribution based on demographic data, the message content manager sends a request to the ASP computer to send an advertisement which conforms to a included set of demographic parameters. Such information is sent to the ASP computer 52. The ASP computer 52 then selects one or more advertisements that conform to the demographic data and sends the advertisements to the end user via modem, fax and messenger service (e.g., postal service). In another embodiment both affinity data and demographic data are sent.

Further, claim 1's "... accounting for at least a quota..." is anticipated by Ballard, col. 10, lines 29-30, where it recites:

For each advertisement displayed on the end user computer according to the methods of this invention, the ad display manager program stores an accounting entry into a log of ad display accounting data 67. The entry includes an identification code for the advertisement, a time and

Art Unit: 2129

date stamp and a time duration during which the advertisement was shown. In some embodiments, the entry also includes a destination web page of where the end user hyper-linked to after viewing the advertisement. The ad display accounting data 67 is sent to the ASP computer 52 periodically or aperiodically. Such accounting data 67 enables the advertising service provider to provide information to the participating advertisers concerning their advertisements. Such information also may be used for determining the value of the advertisement bandwidth provided by the ASP 52 and for determining how much to charge participating advertisers.

Claim 1's "selecting an item for a current cluster from items allocated to the current cluster; and," is anticipated by Ballard, col. 10, lines 6-7, where it recites:

Once the ASP computer 52 makes the selections, the advertisements or identifications (e.g., web page address) of the selected advertisements are sent to the end user computer along with the playback criteria. The end user computer 14 stores the advertisements or identifications and the playback criteria. A playback manager program determines when to display an advertisement on the end user computer. For example, ads may be displayed while the end user is off-line and the computer is idle, or while the computer is loading a program.

Claim 1's "effecting the item." is anticipated by Ballard, col. 10, lines 8, where it recites:

Once the ASP computer 52 makes the selections, the advertisements or identifications (e.g., web page address) of the selected advertisements are sent to the end user computer along with the playback criteria. The end user computer 14 stores the advertisements or identifications and the playback criteria. A playback manager program determines when to display an advertisement on the end user computer. For example, ads may be displayed while the end user is off-line and the computer is idle, or while the computer is loading a program.

## **Claim 2**

Art Unit: 2129

Claim 2's "...the plurality of items comprises a plurality of ads, and" is anticipated by Ballard, col. 9, lines 39-45, where it recites:

For advertisement distribution based on demographic data, the message content manager sends a request to the ASP computer to send an advertisement which conforms to a included set of demographic parameters. Such information is sent to the ASP computer 52. The ASP computer 52 then selects one or more advertisements that conform to the demographic data and sends the advertisements to the end user via modem, fax and messenger service (e.g., postal service). In another embodiment both affinity data and demographic data are sent.

Claim 2's "... effecting the item comprises displaying the ad." is anticipated by Ballard, col. 10, lines 8, where it recites:

Once the ASP computer 52 makes the selections, the advertisements or identifications (e.g., web page address) of the selected advertisements are sent to the end user computer along with the playback criteria. The end user computer 14 stores the advertisements or identifications and the playback criteria. A playback manager program determines when to display an advertisement on the end user computer. For example, ads may be displayed while the end user is off-line and the computer is idle, or while the computer is loading a program.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Specifically:

- A. Jameson (U.S. Patent Number 6,965,867 B1; dated 15 NOV 2005; class 705; subclass 008) discloses methods and apparatus for allocating, costing, and pricing organizational resources.

Art Unit: 2129

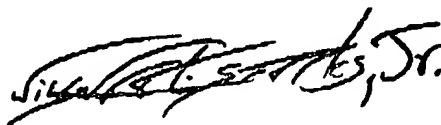
- B. Jameson (U.S. Patent Number 6,032,123 A; dated 29 FEB 2000; class 705; subclass 008) discloses a method and apparatus for allocating, costing, and pricing organizational resources.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

**S. P. E. David Vincent** (571) 272-3080

**Official (FAX)** (571) 273-8300

A handwritten signature in black ink, appearing to read "Wilbert L. Starks, Jr.", with a stylized, cursive script.

Wilbert L. Starks, Jr.  
Primary Examiner  
Art Unit 2129

WLS

23 October 2006